





DWR News is published twice a year. Any questions, comments, and story ideas are welcomed by the DWR News editors.

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DWR's	Northern	District	Helps	Bring	Water	T
Drough	bt-Stricken	ı Klamat	b Basi	in		

In a massive cooperative effort involving private industry, federal assistance, and State government, DWR's expert teams at the Northern District Office were able to assist in the relief effort to bring water in the form of wells to the Klamath basin.

Update 2003 of the California Water Plan, A Strategic Plan for Sustaining California's Water Resources

To meet California's future water needs, a comprehensive plan must be constructed. Taking into account the growing population, mix of dry and wet years possible, global warming, and a multitude of public and private interests, Bulletin 160 will be the blueprint to help shape the destiny of water use in California.

DWR Drills Mendocino County Monitoring Wells

In accordance with the Critical Water Shortage Contingency Plan from the Governor's Advisory Drought Planning Panel, DWR drilled a series of wells in Mendocino County to help monitor and store groundwater for future use.

Water, Power and FERC, DWR Seeks New License for Oroville Facilities

As the deadline for relicensing Lake Oroville facilities through FERC looms closer, DWR continues to work with agencies, residents of Oroville, environmentalists and recreationists who have a stake in the license conditions.

Lime Saddle Campground Grand Opening

With the construction of the new campsite at Lime Saddle, DWR is providing high-quality facilities to bring more recreationists to the Oroville area.

Ruth Lake Contract

Nearly 40 years after the Davis-Grunsky Act was passed and DWR appropriated a contract for the recreational maintenance of Ruth Lake in Trinity County by a local water district, the contract drew to a close.

Former DWR Director Ronald Robie Brings Broad Experience to Appellate Court Post

Former DWR Director Ronald Robie continues to serve California

Reclamation Board Tour

DWR'S NORTHERN DISTRICT

HELPS BRING WATER TO

D R O U G H T

STRICKEN

KLAMATH

BASIN

By Roger Canfield



Six weeks after the Governor's May 4, 2001 declaration of a drought emergency in the Upper Klamath River Basin, wells drilled under the supervision of the Department of Water Resources were bringing some relief to parched areas of Siskiyou and Modoc counties.

Working with the Governor's Office of Emergency Services (OES), DWR mobilized equipment and personnel to drill thousands of feet into the earth, past stingy dry sediments and impermeable clays, into waterfriendly fractured rock. Some of the water was found in hundreds of feet of broken rock nearly a half mile below the high desert surface.



The dry riverbeds of the Klamath Basin.

With most of the 10 wells producing 9,000-10,000 gallons per minute (gpm), and one well yielding 12,000 gpm, it was realized that bigger pipes and special-order pumps would be needed. "You don't get 10,000 gpm pumps off the shelf," said DWR engineering geologist Noel Eaves.

The 10 wells, including pumps, collectively have cost \$5 million. The money came from State Natural Disaster Assistance Funds administered by the Governor's Office of Emergency Services, Title 19 of the California Code of Regulations.

In a broader program, the Department is working with other agencies researching the groundwater resource in the Klamath Basin in order to supplement scarce surface water supplies for agriculture and wildlife in the future. For DWR's Northern District, this is an effort that began years ago.

"It took an emergency to draw attention to it, but we've been working 15 years on this," said Bill Mendenhall, Chief of the Northern District's Resource Assessment Branch.

How DWR Brought Water to the Party

Three weeks after Governor Davis issued a drought emergency proclamation at the request of Modoc and Siskiyou counties, DWR groundwater specialists began coordinating the drilling of wells. A well siting committee staffed by DWR, the Tulelake Irrigation District (TID) and OES identified 14 promising well sites and DWR engineered the basic well designs and expedited environmental and archaeological reviews.

"I was amazed at how fast things got done," said DWR Research Analyst Pat Parsons.

Using the Standardized Emergency Management System (SEMS), which instantly provides a command structure to meet logistical and other needs, DWR's Northern District moved quickly in response to the Governor's emergency proclamation. "This was not an eight - to - five job," said Northern District Chief Dwight Russell. "Our team put themselves out day after day, working months on end at peak energy levels."



Skills

Russell praised the skills of his staff geologists, engineers, and others who helped choose the well sites and watched over environmental, cultural, water quality, aquifer stability, and other issues.

"We had the skills on the spot where they were needed," Russell said.

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DWR's Northern District Helps Bring Water To
Drought Stricken Klamath Basin
Drought Stricken Klamath Basin



(From left to right) Greg Dwyer, a Graduate Student Assistant, Seth Lawrence, a Water Resources Engineer, and Dan McManus, an Associate Engineering Geologist are in the process of installing a flowmeter on a TID well discharge pipe to measure flow velocity.

Among those at the center of the action were Noel Eaves and Mike Ward of Northern District's Groundwater Section. Technical staff members of the groundwater section that logged long days, including weekends, in the Tulelake area included Associate Engineering Geologists Dan McManus, Kelly Staton, and Debbie Spangler; Engineering Geologist Bill Ehorn; Junior Engineering Technician April Scholzen; Civil Engineer Seth Lawrence; Water Resources Engineer Sean Dunbar; Graduate Student Assistant Greg Dwyer; and Engineering Student Assistant John Ayres. The field staff collected geologic and hydrologic data from well sites, oversaw compliance with government regulations, monitored groundwater levels in grids around each new well to measure any impacts on existing wells, and worked with local well owners to mitigate any impacts.

DWR provided technical advice while the Lang Drilling Company, working under contract with TID, completed wells ranging in depth from 571 to 2,380 feet. Nimbus Engineering provided project management around the clock.

DWR moved one well site to protect a Native American cultural site, and at another site relocated a mud pit to protect bank swallows that had taken up residence in a freshly dug pit.

"It was really good to work with DWR," said Earl Danosky, Executive Director of TID. "DWR was looking out for our interests on environmental, cultural, and other issues."

Jessica Salinas, a Northern District Associate Land and Water Use Analyst who served as an Information Officer under the SEMS process, responded to media inquiries from throughout the United States, as well as to the concerns of Klamath Basin residents.

"It 'really hits home' to read and answer mail from people who in some cases are losing their family farm," Salinas said. Yet, she said, "DWR received incredibly positive comments...no negatives."

DWR's well drilling "brought the first light of hope" to some people in the drought-stricken area, said Mike Ward. "There is immense appreciation for DWR. We gained trust."

Graduate student John Ayres said there was "a steady stream of local residents watching us log samples on the ground. The local network seemed to know everything about every well."

DWR's entire Northern District staff, whether posted to the field or at District headquarters in Red Bluff, pitched in to support the Department's response to the Klamath Basin water shortage. Toccoy Dudley, a Senior Engineering Geologist and Chief of the Groundwater Section, kept his shop open for regular business while most of his staff was concentrating on the Klamath Basin project. Pat Parsons created the crucial Klamath Basin groundwater maps, assisted by GIS Student Assistant Dorothy Watkins. Engineering Student Assistant Nicole Martin organized the mass of data collected at the well sites. Environmental Specialists Dave Boegner and Perry LeBeouf worked in Tulelake. Earl Hansen, a retired annuitant and Water Resources Engineer, provided technical assistance.



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The Payoff

Water was first struck at Well #1 located at Hill and Kandra roads in Tulelake. The first well, and those that followed, exceeded initial yield estimates.

The original goal of 30,000 gpm from 14 wells was achieved with four wells. With the 10th well, the estimated annual production jumped to 70,000-80,000 gpm, calculated at almost 10 percent of the Klamath Project's annual production. Further, the well production suggests that the Tulelake area has one or more deep aquifers that could provide a long-term supplemental groundwater source to provide water for agriculture, wildlife and emergency topsoil protection

during future droughts.

While bringing home the water, DWR also ensured that the wells would be monitored for possible impacts on neighboring wells, aquifer levels, and water quality.

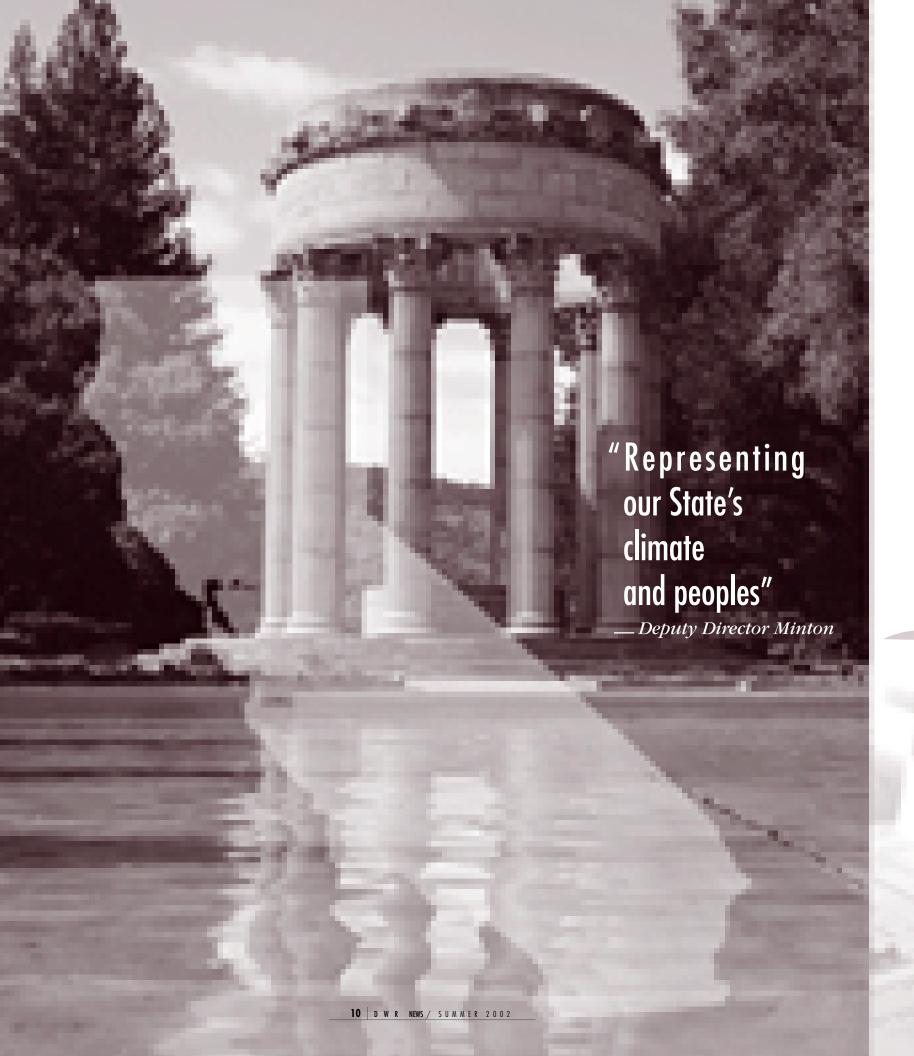
For details of progress on well drilling and groundwater studies, please see the DWR Northern District Web page at

http://www.dpla.water.ca.gov/nd/ KlamathDrought/index.html

THE ASHORT STORY

By Roger Canfield

Water has always been precious in this high desert. The federal water projects, begun in 1907, were preceded by 25 years of private ditch companies watering thousands of acres. The Klamath area is rich in frontier and water history. Here the Hudson's Bay Company trapped beavers, John C. Fremont explored, and the Modoc Indian war captured the nation's attention. Only five years after the Modoc War ended with the U.S. Army execution of Modoc leaders Captain Jack and Boston Charley, in 1882 a private company, Linkville Ditch Company, dug a two-mile ditch from the Link River to town lots. Private digging for irrigation, and power continued apace from 1882 through 1904.



Update 2003

of the California Water Plan

A Strategic Plan for Sustaining California's Water Resources

By Roger Canfield

Interest in the California Water Plan has steadily grown since the Bay-Delta Accord of December 15, 1994 and inception of the CALFED Bay-Delta Program in 1995. Also, in 2001, during the first dry water year since the Delta Accord and the drought in the Klamath basin, there was growing concern that California could experience a water crisis during the next drought cycle. Water managers, the public, and media expressed this concern and called for proactive planning by the State to assess and plan for California's growing water needs while sustaining its water resources and economy.

Today, California's State and federal legislators and water stakeholders are looking to *Update 2003* as the strategic process and plan for identifying what the State's additional future water needs could be after CALFED actions and the Colorado River 4.4 Plan are fully implemented. Consequently, the California Water Plan, is

the strategic plan for managing and developing California's water resources and continues to receive greater attention.

Update 2003 will consider multiple plausible futures for our water supplies and uses, a greater number of water management options than in prior plan updates, and the consequences of potential global climate change on our water resources and infrastructure. The Department of Water Resources is undertaking an historic new process to build consensus among an expanded group of stakeholders and to open up the process of preparing California's Water Plan to the public as never before. The goal is to update the Water Plan by the end of 2003 in a way that meets Water Code requirements, has broad support among California's water community, and is a useful document for the public, water planners, legislators and other decision-makers.





Sarah Goldberg, California Center for Public Dispute Resolution, Howard Moore, an interested party, Baryohay Davidoff of DPLA, and Mohammad Rayej of DPLA listen to the remarks of the speaker.

History in the Making

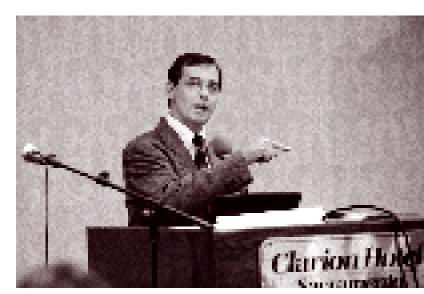
Perhaps the significance of the California Water Plan can best be illustrated by its predecessors that explored options such as the Central Valley Project in the 1930s, the Feather River Project, the San Luis drain, the Peripheral Canal, and most recently the protection and sustainability of the Sacramento-San Joaquin Delta.

The California Water Plan is a dynamic, "living document," that DWR periodically updates in accordance with the Water Code (see the sidebar on Water Code provisions). The first Water Plan was published by DWR as Bulletin 3 in 1957. Since then, DWR has prepared seven Water Plan Updates, published as the Bulletin 160 series. The Water Code now requires DWR to update the California Water Plan every five years (Section 10004 (b) (1)). DWR published the last Update in 1998, and will publish the next one by the end of 2003, which will include forecasts for California's water supplies and needs for the next 30 to 50 years.

A New Way of Water Planning

"DWR has fundamentally reformulated and expanded the process and content of the next Water Plan Update," said DWR Director Thomas M. Hannigan in a recent presentation. To meet these increased demands and expectations, DWR initiated in Fall 2000 a new approach, scope, and process for preparing *Update 2003* to:

- promote an open and collaborative stakeholderbased strategic planning process;
- assemble an expanded and more representative
 65-person public Advisory Committee and 260-person
 Extended Review Forum;
- use outside facilitation services to foster a consensusseeking process; and
- capitalize on eGovernment technology (email and the Internet) to provide online public access to *Update 2003* assumptions and estimates, information, and water supply and use data.



Lloyd Fryer from the Kern County Water Agency shares advisory duties.

Broad Representation

The *Update 2003* Advisory Committee is comprised of an extraordinary array of interested groups and stakeholders. Working with such a large and diverse public Advisory Committee is a first for preparing the California Water Plan. The 65 Advisory Committee members represent a multitude of diverse views, broad range of water interests, and all regions of the State. In addition to water districts and urban and agricultural water contractors, it also has representatives from environmental groups, tribal interests, business and recreational groups, labor unions, and State, federal and local governments. "The next California Water Plan – and all future ones – must reflect the needs and interests of all Californians," said DWR Deputy Director Jonas Minton.

Open Participation

The Committee is "the most broadly participatory effort in DWR history, representing our State's climate and peoples," said Minton. This revitalized process will hopefully help DWR identify previously underutilized water supplies and unmet needs. DWR maintains a Web

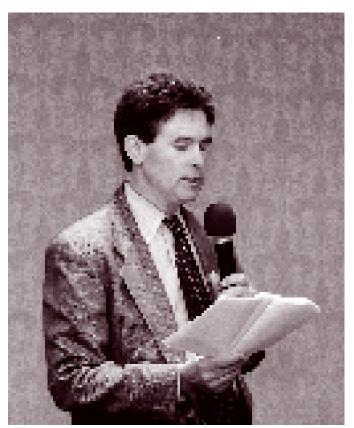
site (www.WaterPlan.water.ca.gov) allowing just about anyone to partake in California's water planning process. In addition to providing general information, the Web site shares work products with stakeholders and the public for review and comment.

This new process is an "open and transparent collaboration" among all stakeholders. For example, at an Advisory Committee meeting, Gregory Weber, the Senior Mediator from the California Center for Public Dispute Resolution, told members, "the purpose of the day is to share ideas and differing points of view. All ideas have value in this setting. We are looking for bold ideas. The goal is to achieve understanding. It is important that participants be able to speak freely." In the interest of seeking consensus, the facilitation team is helping DWR and its stakeholders become better listeners to ensure that all constituencies and their range of perspectives are heard.



Kamyar Guivetchi, Manager of DPLA Statewide Planning Branch and Scott Cantrell from the Department of Fish and Game. Cantrell is a member of the advisory committee for Bulletin 160.





Greg Weber from the California Center for Public Dispute Resolution addresses the committee members.

DWR has published the preliminary draft Assumptions & Estimates for *Update 2003* online for full and continuous public access on the *Update 2003* Web site. This online report is intended to meet requirements added to the Water Code by Senate Bill 1341 (Burton) and make transparent the framework, process, key features, assumptions, and data that DWR intends to use in preparing the next Water Plan Update. The release of these draft Assumptions & Estimates will promote early public feedback that DWR and the Advisory Committee will use to improve on the information underpinning *Update 2003*.

Elevating Expectations for Update 2003

"The expanded public process and heightened interest in the Water Plan have in turn generated greater expectations for DWR to collect additional data, conduct additional analyses, and utilize more sophisticated planning tools and models," said Kamyar Guivetchi, Chief of DWR's Statewide Planning Branch. The process is generating many recommendations, new workload, and changes to the form and content of *Update 2003*.

Stakeholders and recent legislation sponsored by State Senator Mike Machado want DWR to prepare and quantify regional as well as statewide Water Portfolios comprised of a broader range of environmental, urban, and agricultural water use and water supply categories for describing, "where we are now." Each regional and statewide Portfolio will include nearly 100 categories; about four times the number presented in the last Water Plan Update. The Water Portfolios will better describe water supplies and water uses, help identify underutilized opportunities and unmet challenges, and will help understand the complexity of water management constraints, options



Katie Shulte-Joung of DPLA takes notes.

and decision-making. DWR proposes to construct Water Portfolios using the best available data from water years 1998 (wet), 2000 (average), and 2001 (below normal / dry) to describe the current status of water supplies and uses. The Update seeks "credible and accurate estimates of water supplies and uses as the basis for considering options and strategies that are suited for future environmental, residential, commercial, industrial, and agricultural uses," said Guivetchi.

In light of the inherent uncertainty of what will happen in the future, stakeholders want, and recent legislation directs, DWR to consider and evaluate a greater number of plausible versions of the future and potential water management options (study plans). Working with Advisory Committee members and other interested parties, DWR is identifying "building blocks" for developing these study plans, comprised of about 40 key factors (i.e., drivers, constraints, and management options that are thought to affect future water supplies and uses), and their nearly 150 related ranges.

"We are asking stakeholders, DWR staff, and interested parties to assemble a number of study plans using different combinations of building blocks to describe where we are going and where we want to be," said Guivetchi. DWR will then quantify and evaluate a reasonable range of the assembled study plans using available technical and modeling tools with direction from the Advisory Committee and as limited by available time and resources.

Update 2003 will explore many intensive water management strategies such as: urban and agricultural water use efficiency, water recycling, desalination, integrated management of surface and groundwater, water transfers, and water pricing, as well as additional conveyance, ground, and surface water storage facilities.



DWR Deputy Director Jonas Minton and Deputy Chief of DPLA Mark Cowin, who is providing coordination between CALFED and the Water Plan Update in discussion.

Global Climate Change

"The Water Plan should not only be able to encompass the historic State-federal compact known as CALFED, but it should also present options for future changes in weather patterns due to global warming," said Deputy Director Minton. While it is "unprecedented and only the uncertainties are certain," it is "prudent" and "reasonable" to consider the potential impacts of future climate change on our water resources and infrastructure. Guivetchi notes that climate change adds to "the utility of the historic hydrologic data we currently use to forecast water futures and projects."

Guivetchi said there is "growing evidence and concern of global climate change impacts on California's hydrology and water systems." "And whatever the uncertainties,"

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Water Plan meetings are bighly attended and encourage participation from the audience and committee members.

Minton told the Advisory Committee, "it makes sense to identify no regrets recommendations for the future. There can be no quick answers, but we must begin the process of thinking about how climate change might affect California's water future." Minton called the process a "learning curve amidst uncertainty about what is happening and what actions to take."

Contributions of the Advisory Committee

Already, the Advisory Committee has assisted DWR in anticipating future events shaping water resources in California; developing new ideas for the management of water; staying in touch with water planning activities of other agencies; and communicating with the public and interest groups.

To date, the Advisory Committee has made a number of noteworthy suggestions. It has suggested creating the

"water portfolios" and helped craft the many Study Plan building blocks. The members also have recommended using actual data, to the extent possible, to prepare the portfolios for current conditions.

When completed in December 2003, *Update 2003* will assess current water supplies and uses, and forecast a range of future water needs for wet, below normal, and dry year conditions. The Update will recommend strategies, methods, and alternatives for meeting these needs, and will identify performance measures to monitor the implementation of water management options. Finally, *Update 2003* will include ways for effectively communicating the Water Plan's findings and recommendations, including the additional data collection and analytical tools needed for improving future Water Plan Updates.

Mailar Boula Provisions

Non-mail 1

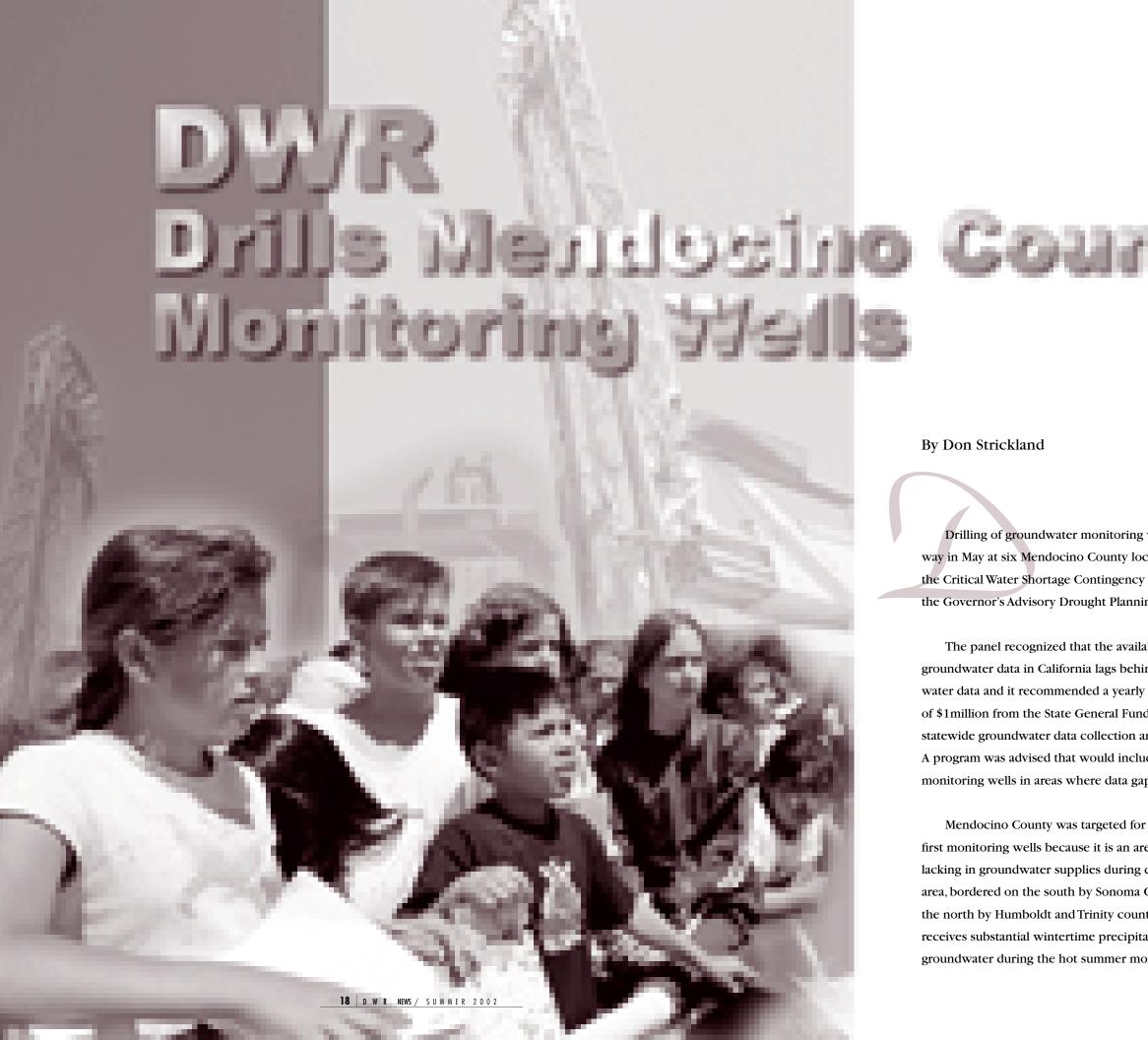
The California Water Code contains the legislative findings for the California Water Plan in Sections 10004-10005. For instance, Section 10005(a) states:

"It is hereby declared that the people of the state have a primary interest in the orderly and coordinated control, protection, conservation, development, and utilization of the water resources of the state ... and that it is the policy of the state that the California Water Plan ... is accepted as the master plan which guides the orderly and coordinated control, protection, conservation, development, management and efficient utilization of the water resources of the state."

The Water Code requires DWR to deal openly and fairly with all contending water interests, and to present clear choices about water resource management. At the same time, final decisions remain with local water interests. In Section 10005(b), the Water Code states that the California Water Plan:

"... does not constitute approval for the construction of specific projects or...for financial assistance...
without further legislative action, nor shall (The California Water Plan) be construed as a prohibition
of the development of the water resources of the state...."

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Spectrum Exploration crew at work,

By Don Strickland

Drilling of groundwater monitoring wells got under way in May at six Mendocino County locations as part of the Critical Water Shortage Contingency Plan developed by the Governor's Advisory Drought Planning Panel.

The panel recognized that the availability of groundwater data in California lags behind that of surface water data and it recommended a yearly appropriation of \$1million from the State General Fund for ongoing statewide groundwater data collection and compilation. A program was advised that would include installing monitoring wells in areas where data gaps exist.

Mendocino County was targeted for some of the first monitoring wells because it is an area particularly lacking in groundwater supplies during droughts. The area, bordered on the south by Sonoma County and on the north by Humboldt and Trinity counties, normally receives substantial wintertime precipitation but relies on groundwater during the hot summer months. A number of its communities are built over "fractured hard rock," which stores groundwater in limited amounts, making residents especially susceptible to water shortages in dry years.

DWR will conduct several workshops this fall for Mendocino County homeowners who have private wells that rely on marginal groundwater sources.

In addition to the Mendocino County wells (three in the Sanel Valley and three in the Anderson Valley), DWR will be installing wells in eastern Riverside County. Groundwater information collected will be posted on a Web site maintained by the Department of Water Resources, Division of Planning and Local Assistance.

The third Sanel Valley monitoring well was installed on the property of Hopland Elementary School, and because May was Water Awareness Month, the event became an educational event for the school's 200 students. School principal Gloria Jarrell said the drilling operation was a made-to-order field trip for her pupils. "We haven't had

the opportunity to see a drilling rig in operation," she said, "and we're looking forward to reading the results on DWR's Internet Web site because we've done a lot with technology at our school and this gives a personal experience to looking at the water table in our own little valley."

After learning about the drilling operation and hearing a water conservation and water safety message, each student received a bag of educational and water safety materials to take home.

Eight-year-old second grader Russell Elliott was particularly impressed with the device that geologists use to check water depth. "When this needle touches water, it beeps," he said, pointing to an electronic sensor on the end of a long measuring tape, "and then they know where the water is in the ground."

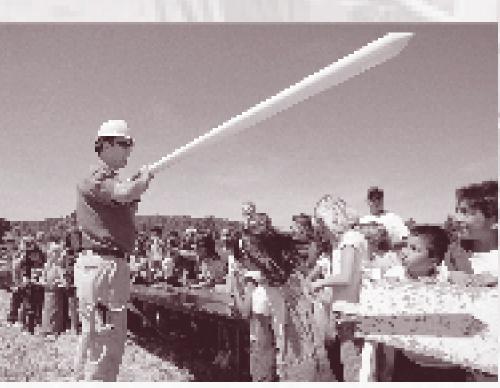
Seven-year-old first grader Cynthia Dominguez paid attention to the water conservation lecture. "When you take a shower, you don't have to stay in for too much time," she said, getting the message that shorter showers save water.

The Mendocino County monitoring wells are being drilled by a crew from the Zamora division of Spectrum Exploration, Incorporated, under the supervision of DWR Associate Engineering Geologist Chris Bonds.

"We're expanding the network of monitoring wells in the area," said Bonds, "to better understand how the aquifer responds during dry years, wet years, and average rainfall years."



Hopland Elementary School students at Water Awareness



DWR Associate Engineering Geologist Chris Bonds shows Hopland Elementary School students a device that will help gather groundwater data from a monitoring well on school property.



DWR retired annuitant Jackie Habib talks about water safety during Water Awareness Month event at Hopland Elementary School.

(background photo) Spectrum Exploration crew at work, Hopland Elementary School, Mendocino County.

DYFR Drifts Menulyshes County Monitoring Wolls

Water runs down the massive spillway from Lake Oroville. The dam and other facilities are part of the ongoing relicensing effort.

DWR SEEKS NEW LICENSE FOR OROVILLE FACILITIES

ower and

By Ted Thomas

As DWR worked around the clock through much of 2001 to help California respond to an unprecedented electricity shortage, it also kept pace with a demanding, multiyear schedule to relicense by January 31, 2007 elements of the State Water Project's Oroville Facilities.

The Oroville Facilities in southern Butte County includes Oroville Dam and associated hydroelectric facilities (Edward Hyatt Powerplant, Thermalito Pumping-

Generating Plant, and Thermalito Diversion Dam Powerplant), the Feather River Fish Hatchery, Thermalito Diversion Dam, Thermalito Forebay and Afterbay, the Oroville Wildlife Area, and recreational lands and facilities.

The Federal Energy Regulatory Commission (FERC) has jurisdiction under the Federal Power Act over the operation of the Oroville Facilities because the power generated is transmitted over an interstate transmission system and because the facilities impact a navigable waterway. The federal government issued an initial 50-year license in 1957 for the facilities known as Project 2100.

DWR must file its application for a new Project 2100 license with FERC by January 31, 2005. Meeting this deadline will necessitate hundreds of stakeholder meetings, myriad studies, and analyses of all aspects and impacts of project operations.

"We chose a collaborative relicensing process that seeks consensus with stakeholders on project operating conditions," said Principal Engineer Rick Ramirez, DWR's Oroville Facilities Relicensing Manager. The Department is regularly meeting with representatives of Indian tribes, local governments, anglers, boaters, other recreationists, environmental organizations, State and federal resource agencies and others to help shape its license application.

A'ELGG

"Additional recreational development is perhaps the number one goal of Oroville area residents," said Ramirez. "The Department's FERC-approved 1994 Lake Oroville recreation plan is now essentially completed with some extras thrown in. The new Lime Saddle Campground opened in July, and work is scheduled this year to build a low-water parking lot at the Bidwell boat launching ramp and to extend the boat launching ramps at the Spillway area, Lime Saddle and Bidwell. At this point, we are working with the Oroville community and others to develop a new recreation plan that will be in effect beginning in 2007."

DWR maintains the goal of securing a new, 30- to 50-year license at reasonable cost and with reasonable operating conditions.

"This is imperative," said Ramirez, "because Oroville is

a multipurpose project that much of the State depends on for affordable water and environmental protection."

"The California public and Legislature voted to build Oroville Dam and the rest of the SWP to help meet the water supply needs of cities, agriculture and industry as well as to enhance fish and wildlife, provide recreational opportunities, repel salinity in the Delta, and help control floods," Ramirez said.

During the big storms since 1955, Oroville Dam has literally been a lifesaver. Even before it was completed, the dam saved Oroville and downstream areas from catastrophic flooding in 1964. Most recently, the dam helped to control flooding during the monster storms of 1997.

DWR is confident that the most intensive analysis would conclude that the Oroville Facilities serve the public interest.



Licensing costs, however, can be significant.

Federal law requires that, in approving an application, FERC give equal consideration to power and nonpower uses of projects. The Oroville Facilities' operational impacts upon instream flows, water temperatures, recreation, fish hatchery operations, aesthetic values, and tribal lands and culture will be examined.

Expensive studies can stack up quickly.

"Some of the costs can be mitigated by using data collected from past and ongoing discussions and consultations with other government agencies, contractors and many others with an interest in Project 2100," said Ramirez.

"DWR has always worked with the public, environmental organizations, and State and federal fish

and wildlife agencies," said Ramirez. "This is paying off in a collaborative relicensing process that will address the concerns of all parties."

EDITOR'S NOTE:

DWR's Internet home page at

http://wwwdwr.water.ca.gov

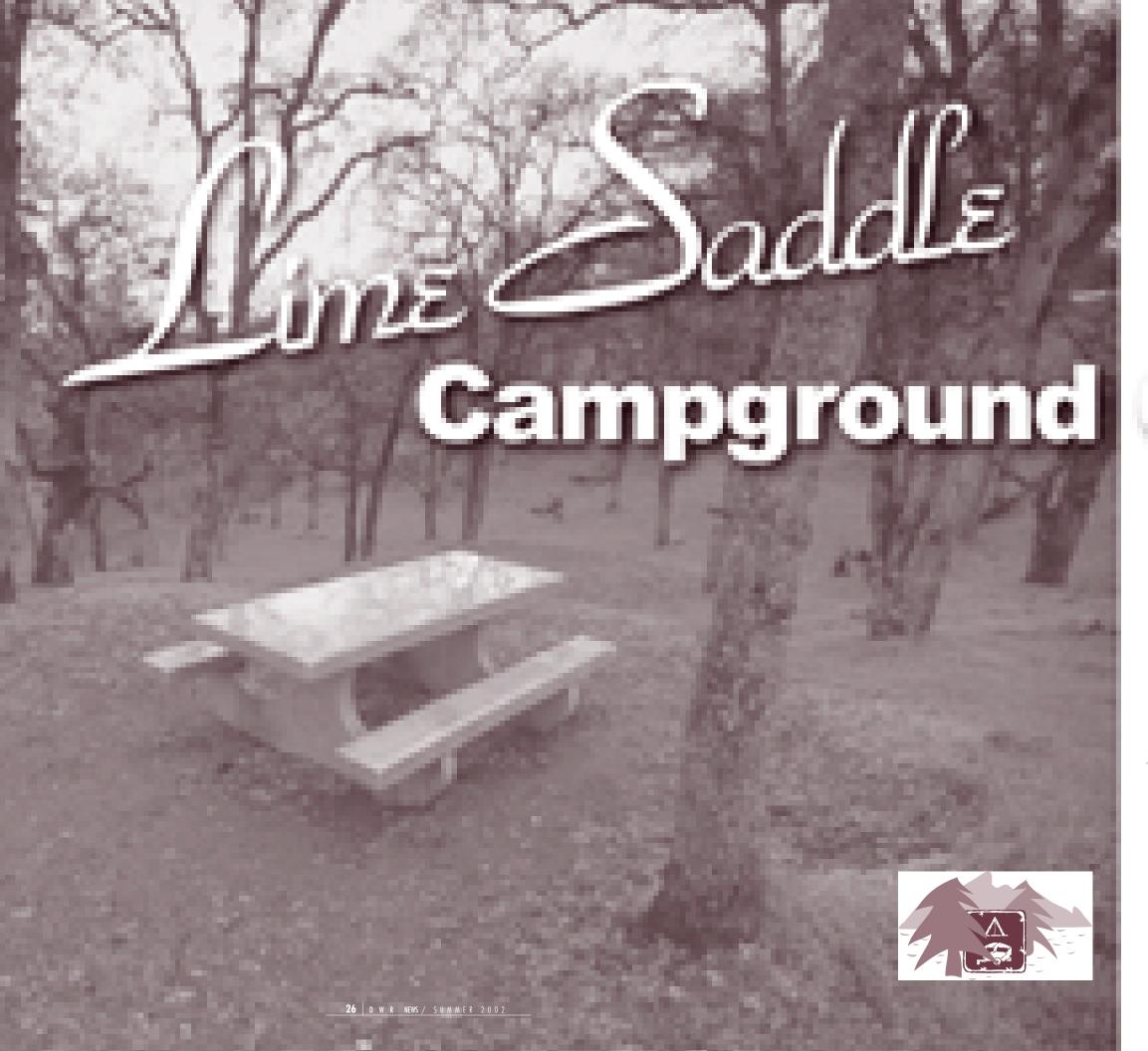
features links to the Department's Oroville Facilities licensing page at

http://orovillerelicensing.water.ca.gov/ and the

Department's Lake Oroville recreation Web site at http:

//wwwdwr.water.ca.gov/LakeOroville/

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By Meghan Blake

Lake Oroville not only has an important role in the State Water Project as the largest reservoir, but it also provides great recreational opportunities for Californians. DWR recently added more recreational facilities to those already existing around the lake by opening the new Lime Saddle Campground.

DWR operates the Lake Oroville facilities under a 50-year license granted by the Federal Power Commission, predecessor to the Federal Energy Regulatory Commission. The initial license, developed with the construction of the dam and powerhouse, called for DWR to provide camping and boating facilities around the lake. This requirement, updated in a 1994 plan that reflected further community input, spurred





Tom Glover, Chief, Oroville Field Division addresses guests attending the Grand Opening of the Lime Saddle Campground.

the construction of additional recreational facilities, including the Lime Saddle Campground.

Three locations were reviewed before locals suggested the current campground area. The chosen site, located at the north end of the lake, just off Pentz Road, will provide easy access to visitors from Chico, Paradise, and Quincy areas.

"Not only were we trying to find a location that was close to other facilities, but also a spot for future development, and conveniently accessed from the highway," said Don Rasmussen, DWR Supervising Engineer in the Division of Flood Management, who worked for the Division of Engineering during the planning and design phases of the campground.

The chosen location provided room for 50 campsites, double the size of the FERC requirement. The area also offered adequate room for a group campsite and boat spurs where people could park their boat trailers next to their campsites. This venue also provided room for future expansion.



Stephen Kashiwada, Chief of Operations and Maintenance and Dick Troy, Department of Parks and Recreation Deputy Director of Operations, in the official ribbon cutting ceremony at Lime Saddle Campground. They were joined by members of local organizations, such as ORAC, the Oroville Area Chamber of Commerce, and members of the public.

Construction of the Lime Saddle Campground began on September 27, 2000. The contractor, Remcon Construction of Oakdale, worked with Division of Engineering, Oroville Field Division, and Department of Parks and Recreation staff to build the campground.

Construction took place throughout the winter months.

"Sand bags, silt fences, and rock barriers had to be built and placed around the construction zones to prevent storm water, carrying dirt and construction debris, from polluting the lake," said Jim Peddy, DWR Division of Engineering.

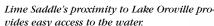
Due to the remoteness of the campground location, bringing in sewer lines from an outside source would be too difficult. The planners decided to create a sewer effluent pond, which would allow the liquid wastes to evaporate and the solids to be stored in a sanitary manner away from the campground. The excavation of the sewer effluent pond was a major undertaking. The rocky soil required the largest bulldozer made to rip through the 93,000 cubic yards of dirt that needed to be removed to create the pond.

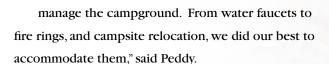
Bringing in adequate water and electricity also proved to be a challenge. Almost one mile of pipeline had to be added to existing distant facilities to bring water into the campground. Electricity was also brought in for the 14 recreational vehicle campsites and three comfort stations.

"Dozens of changes were made to satisfy the Department of Parks and Recreation's needs in order to

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Despite all of these demanding tasks, the campground opened on June 29, 2001. The Lime Saddle Campground is the first new campground in 10 years to be opened by the Department of Parks and Recreation.

"The last month was extremely hectic," said Dave
Ferguson, Supervising Engineer who is now a Retired
Annuitant at the Oroville Field Division. "We all had to
come together and tie up the loose ends, but the end result
was a really good product."

Construction continued on for a short period of time after June 29 in order to finish the group campground and make some adjustments to be in compliance with the Americans with Disabilities Act (ADA).



The State Water Project Contractors funded the planning, design, and construction of the Lime Saddle Campground through the Department of Water Resources. The finished product cost \$7 million.

The finished 50-site campground offers 30 individual tent spots, a group site for six tents, and 14 recreational vehicle spaces with full hookups. The campground is equipped with restrooms with hot running water and showers, and a network of paved roads connects all of the campsites.

"This is a state of the art campground," commented Tom Glover, Chief of the Oroville Field Division. "Once the campground is publicized a little more I think that there will be many visitors to the campground during the spring, summer, and fall months."

Lake Orwille RECREATION FACILITIES

By Meghan Blake

DWR in cooperation with Department of Parks and Recreation and the Department of Boating and Waterways has completed the following recreational projects at Lake Oroville since the dam was completed in 1968:

- Lime Saddle Campground 50-site campground with 30 individual tent sites, 1 group site, and 14 RV sites
- Loafer Creek Campground 137 campsites and 6 group sites
- Bidwell Canyon 74 camp sites
- Boat-in camps 89 individual sites and 12 group sites
- Monument Hill Concrete launch ramp, picnic areas, restroom, and parking
- Wilbur Road concrete launch ramp and parking
- 10 Floating Campsites
- 2 additional floating restrooms
- 41-mile mountain bike trail
- Equestrian group camp with 15 sites and restrooms
- Aquatic Center
- En-route RV parking at North Forebay
- Picnic area and swim beach at South Forebay
- Expansion of Feather River Fish Hatchery
- Fish Cleaning Stations
- Other access roads, parking, and restroom parking improvements in conjunction with the Department of Boating and Waterways

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By Meghan Blake



(from left) Doug Rischbieter, DWR Environmental Services Office, Mike Gladding, Ruth Lake Community Services District, and Brian Newell, Humboldt Bay Municipal Water District, work together to make the Ruth Lake facilities enjoyable for all.

Ruth Lake in Trinity County was the first of 32 projects to receive funding for recreational development under the Davis-Grunsky Act of 1960.

The contract, administered by the Department of Water Resources, has provided attractive boating and other recreational facilities at the Humboldt Bay Municipal Water District (HBMWD) reservoir on the Mad River.

It was a Davis-Grunsky Act milestone when the Ruth Lake contract expired on December 31, 2001. This year, DWR presented certificates to the HBMWD and to the Ruth Lake Community Services District, its other partner in the Ruth Lake venture.

"The Davis-Grunsky program, through recreation facility development grants, has resulted in nearly four decades of remarkable recreation benefits for people statewide, opportunities which may never have been created in the absence of this DWR program, "said Doug Rischbieter, DWR Environmental Scientist. Doug, now with the Environmental Services Office, for 10 years was Northern District's annual inspector of the Ruth Lake recreation facilities.

The Davis-Grunsky Act was authorized in 1960 as a part of the Burns-Porter Act. It provided grants for recreation and wildlife and fish enhancement. The program also offered loans for construction of local water projects, agricultural water conservation projects, and dam and reservoir rehabilitation. The project offered a total of \$130 million to be dispersed to qualified applicants.

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RUTH LAKE CONTRACT

The Humboldt Bay Municipal Water District, formed in 1956, originally built Ruth Lake to establish a reliable water supply for the growing cities and industry of Eureka and Arcata and their outlying suburban areas. Ruth, a rural community located on the Mad River in Trinity County, proved to be the best place for the development of a reservoir. HBMWD bought the land where the reservoir was to be located from private landholders and Trinity

On September 29, 1960, HBMWD broke ground at the location for Matthews Dam. At that same time HBMWD was busy submitting its recreational development plan and application to the Department of Water Resources to receive a grant under the Davis-Grunsky Act. On February 16, 1962, construction was deemed complete when Ruth Lake crested the 167-foot tall dam and flowed over the spillway for the first time. This new reservoir would provide storage capacity for approximately 50,000 acre-feet of water.

Humboldt Bay Municipal Water District was awarded the first Davis-Grunsky grant on February 7, 1963 in the amount of \$300,000 after proving to be a worthy candidate for the money. According to provisions of the Davis-Grunsky Act, the grant was given for the portion of the construction cost of the dam and reservoir properly allocated to recreational purposes of statewide interest that were incidental with the building of the dam. A contract was signed by DWR and HBMWD stating that HBMWD would build, operate, and maintain certain recreational facilities identified in its recreational development plan, subject to inspection at any time during the contract's term by DWR, in exchange for the grant money.

"The Davis-Grunsky program was a key piece of the initial building of water services for Humboldt Bay Municipal Water District, but it also helped our relations with Trinity County and their recreational needs," said Carol Rische, General Manager of the Humboldt Bay Municipal

Water District.

Today, Ruth Lake is still a gem in Trinity County and just as valuable to HBMWD as it was when it was built. The Ruth Lake facilities have been inspected every year by DWR to make sure they are in accordance with the contract provisions. Coordination of contract issues often becomes difficult due to the chain of entities involved with the recreation facilities at Ruth.

HBMWD leases the land around the lake to Trinity County on a long-term basis for recreational purposes. Trinity County then subleases the land to the Ruth Lake Community Services District, which oversees the recreational areas. This leaves DWR with a very small role in the recreational facilities at Ruth Lake.

"DWR doesn't have a huge role out here, but because of the contract, we are helping out here to make sure that the facilities are maintained throughout the contract term," said Doug Rischbieter last summer as he looked over one of the seven designated picnic sites.

During DWR's final inspection, Doug carefully checked over every item on the DWR inspection list, which he made in 1991 to streamline the inspection process. The list includes items that were designated in the original HBMWD recreational plan submitted to DWR in order to receive a Davis-Grunsky grant.

"HBMWD is ultimately responsible for the contracted recreational facilities that are available at Ruth," said Rischbieter.

The inspection list includes specific numbers of campsites, picnic sites, boat launches, toilet facilities, and standards for access to drinking water and emergency personnel.

"The contract specifies the types, maintenance standards, and public availability of the recreational facilities at the Ruth Recreation Area," added Rischbieter.

Along with the inspection of the facilities, an annual

written report was submitted to DWR by Ruth Lake Community Services District detailing revenues from and expenditures for recreation, estimates of annual use, and an analysis of the adequacy of the facilities.

"We have between 14,000 and 18,000 people visit Ruth Lake every year. We have a marina and a few day use areas to supplement the four campgrounds," said Mike Gladding, Manager of the Ruth Lake Community Services District (RLCSD).

The majority of the visitors to the lake come from the Humboldt area, but in the past couple of years there has been an increasing trend in the number of people who come to visit from the Sacramento and San Francisco areas.

"It's one of our goals to keep this area quiet and not as developed as other vacation spots," added Gladding.

As the contract quickly closed on the expiration date of December 31, 2001, so did the need for RLCSD to maintain the recreational facilities specified by DWR. But the future of Ruth Lake doesn't look bleak.

"We don't see a lot changing in Ruth Lake's future. We have a great recreational component up there and a reliable water supply," commented Rische.

However there will be a few things changing, and all for the better.

"Maintaining and upgrading the facilities around the lake is our next goal. We want to upgrade the docks and walkway floats in the next couple of years," said Brian Newell, Hydroelectric Operator at Ruth Lake for HBMWD, when speaking of the future of Ruth Lake.

Despite DWR's leaving the recreational side of Ruth Lake, there appears to be no end to visiting anglers, waterskiiers, or personal watercraft users. The cooperative relationship formed via the Davis-Grunsky Act between Humboldt Bay Municipal Water District, Department of Water Resources, and the Ruth Lake Community Services District has been very successful and much appreciated and enjoyed by everyone involved.

Other rural northern California facilities partially

funded by the Davis-Grunsky Act include Lake Siskiyou near Mt. Shasta, Ewing Reservoir in Hayfork, and Little Grass Valley Reservoir near La Porte.



(from left) Brian Newell, HBMWD, Doug Rischbieter, DWR, Mike Gladding, RLCSD, and Larry Maul from RLCSD discuss the future of recreation at



California Supreme Court Justice Ronald George, right, administers the oath of office to Ronald B. Robie, as the former DWR Director and Sacramento County Superior Court Judge becomes an Associate Justice of the Third District Court of Appeal. Watching proudly are Robie family members, from left to right: daughter, Melissa, Justice Robie's son, Todd, and wife, Lynn.

Former DWR Director Ronald Robie

Brings Broad Experience to Appellate Court Post

By Pete Weisser

Shortly after taking the oath as an Associate Justice in the Third District Court of Appeal, former DWR Director Ronald B. Robie said, with characteristic enthusiasm:

"I've loved every job I've ever had."

Justice Robie has distinguished himself in many jobs, working in all three branches of State government.

As a legislative consultant to the Assembly Water Committee, he became an expert on California water law and helped draft influential water legislation. Serving as a member of the State Water Resources Control Board (SWRCB), he worked in the regulatory arenas of water rights and water quality.

While DWR Director from 1975-1983, he faced the first big California drought since the 1930s and led a successful campaign to win Legislative approval of an expansion of the State Water Project, including a Peripheral Canal.

For the past two decades, he was a Sacramento County Superior Court judge, highly regarded for his dedication, heavy workload, and enthusiasm. Coleman Blease, an appeals court justice who's known Robie for more than 30 years, said at Robie's January 15 oath-taking ceremony in the State Supreme Courtroom in Sacramento that Judge Robie consistently displays "an infectious enthusiasm for life and the law."

Robie believes having worked in all three branches gives him insight into the realities faced by legislators, administrators and trial judges.

"My experience has given me an appreciation of the roles and responsibilities of the different branches of government," said Robie.

As DWR Director, Robie provided leadership in 1976 -77 "when we faced the first major statewide California drought since 1934." The year 1977 ranked as one of the driest years in California history, when SWP deliveries dipped under 600,000 acre-feet. To combat the drought, Robie implemented conservation measures, encouraging innovative water management and storage programs.

He led a significant battle to achieve legislative passage

in 1980 for SB 200, a measure authorizing an expanded State Water Project, including a Peripheral Canal.

It was signed into law by Governor Brown.

Though the measure was overturned by a 1982 referendum, Robie still voices great pride in winning legislative passage ("both houses by a two-thirds vote") of controversial legislation that would have approved SWP expansion and authorized a Peripheral Canal. "It was a very significant legislative achievement," he said.

Robie speaks highly of the people with whom he served at DWR.

"The people at the Department were just great," he said. He often encounters former coworkers and enjoys speaking with them. At a DWR ceremony in May 2001, at which the SWP was honored as one of the greatest engineering achievements of the 20th Century, he spoke glowingly of the dedication of former DWR employees who planned and built the State Water Project.

They, in turn, remember him vividly and swap stories about his challenging era as Director.

Gerald Meral, who served as Robie's Chief Deputy
Director, predicted that Robie "will do a terrific job on the
Court of Appeal."

Meral noted that Robie enjoys the historic distinction of having been an appointee of four California governors, two from each party. Governor Ronald Reagan appointed Robie to the SWRCB. Governor Edmund G. (Jerry) Brown Jr. appointed Robie as DWR Director. Governor George Deukmejian appointed Robie to the Superior Court. Governor Gray Davis appointed him to the Court of Appeals, Third Appellate District.

Robie is a graduate of the University of California at Berkeley. Robie earned his law degree at McGeorge School of Law while working as a legislative committee consultant. He and his wife, Lynn, married for 43 years, have lived in Sacramento for four decades. Lynn served 13 years on the Sacramento City Council. Lynn, a Registered Nurse, is a graduate of the Kaiser Foundation School of Nursing.

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By Don Strickland

Five of the seven members of The Reclamation Board, who took office in April, spent Friday, August 17, 2001, on a tour of Chico area flood control projects and problem areas on the upper Sacramento River.

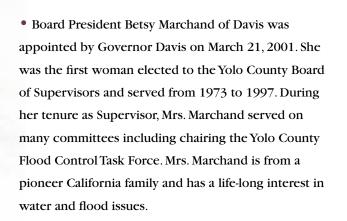
Burt Bundy of Los Molinos, Tony Cusenza of Modesto, William Edgar of Sacramento, Mark Garrett of Merced, and Jeff Mount of Davis all made the trip. Betsy Marchand and Cloria Moralez were unable to attend.

• Burt Bundy, the Board Secretary, was appointed by Governor Pete Wilson on July 16, 1998. A Los Molinos resident, Bundy served as a Tehema County Supervisor from 1981 to 1993. He and his wife run a small commercial cattle and catfish operation at the ranch where he has lived for more than 50 years.

- Tony Cusenza, of Modesto, was appointed to The Reclamation Board by Governor Gray Davis on March 21, 2001. A retired dentist, he is a member of the Stanislaus Fish and Wildlife Committee and the Stanislaus County Planning Commission.
- William Edgar, of Sacramento, was also appointed by Governor Gray Davis on March 21, 2001. In a government career spanning nearly 40 years, he served as both City Manager and Assistant City Manager for the cities of Sacramento and Pleasanton and as executive director for the Sacramento Flood Control Agency and the City/County Office of Metropolitan Water Planning.
- Mark Garrett, of Merced, was appointed by

Governor Davis on March 21, 2001. He is a licensed real estate broker and Managing Partner of a private investment company. He served in Washington DC, as an Administrative Assistant to Congressman Gary Condit from 1989 to 1991. From 1977 to 1989, he held a number of senior-level positions on the staff of Congressman Tony Coelho, both in Washington and in California.

• Jeff Mount, Ph.D., was named to the Board by Governor Gray Davis on March 21, 2001. Mount is a professor in the U.C. Davis Geology Department and active in teaching and research about California's rivers and watersheds. His book, "California Rivers and Streams: The Conflict Between Fluvial Process and Land Use," is widely used as a college text and reference for professionals.



• Vice President Gloria Moralez, of Fresno, was appointed by Governor Gray Davis on March 21, 2001. She is the President of the Multi-Ethnic Small Farm & Community Development Corporation in Fresno. She was recently elected National President of the Rural America Association of Community Based Organizations based in Oklahoma City. Ms. Moralez has experience in farming, environmental, water, and soil issues.

After touring flood project sites in the Sycamore
Creek and Rock Creek/Keefer Slough areas, the attending
Reclamation Board members boarded boats at the
Woodson Creek County Park for a look at bank erosion and
river concerns from the park to Hamilton City.

The tour, partially conducted by DWR engineers, will help The Reclamation Board members better understand flood control issues that will come before them for decisions. As board member Mark Garrett put it, "this kind of helps us connect the dots."

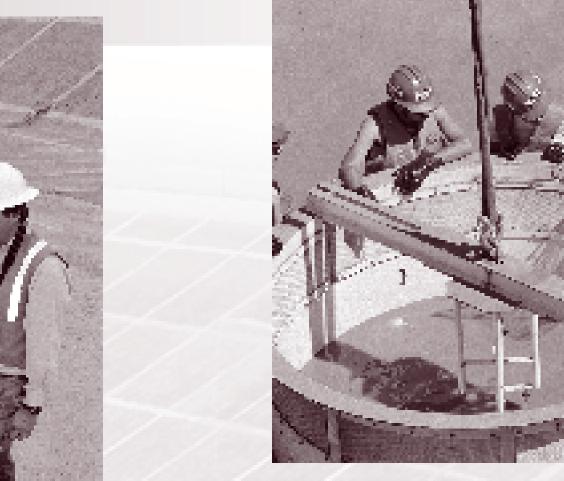
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The Aqueduct Regular of





Director Thomas Hannigan and Chief of Engineering Les Harder inspect a drained area of the California Aqueduct.



The California Conservation Corps assisted in gathering fish from the drained section during the repair. The fish were then transported to safer waters by the team.



The repair site on the aqueduct. Such leaks are repaired as quickly as possible to allow deliveries to continue.



